

AMENDMENTS TO THE CLAIMS

Please cancel Claim 10. Please amend Claims 1, 3, 5, 7, 8, 12, 13, 14, 17, 18, 19, and 21 as follows. Please add new Claim 22. Claims 2, 4, 6, 9, 11, 15, 16, and 20 remain as previously pending.

1. (Currently Amended) A splint system adapted for generating traction on a leg of a patient, said system comprising:

a telescoping splint having a distal end and a proximal end;

a distal limb support member disposed on the distal end of the telescoping splint, said distal limb support member being adapted to accommodate a foot of the patient, limit proximal motion of the foot relative to the telescoping splint, and impart caudally directed force on the top of the foot, wherein the telescoping splint does not distally extend beyond the distal limb support member;

a proximal limb support member disposed on the proximal end of the telescoping splint, said proximal limb support member being adapted to fix the axial support member to the leg of the patient at a proximal position on the leg;

an axial support member operably connecting, and maintaining a relative position between, the distal limb support member to the proximal limb support member; and

means for securing the telescoping splint in a telescoped length to apply traction to the leg of the patient; and

wherein the axial support member is fabricated to allow for the acquisition of X-rays or magnetic resonance images while the apparatus is attached to the limb and providing tension on the limb.

2. (Original) The apparatus of Claim 1 wherein said axial support member is radiolucent.

3. (Currently Amended) The apparatus of Claim 1 wherein said axial support member, said distal support member, and said proximal support member are fabricated from non-magnetic materials.

4. (Original) The apparatus of Claim 1 wherein said apparatus further comprises a measurement apparatus to determine the amount of traction force being generated in the telescoping splint.

5. (Currently Amended) The apparatus of Claim 1 wherein said telescoping splint is selectively collapsible or expandable and wherein the telescoping splint collapses to 50% or less of its fully expanded length.

6. (Original) The apparatus of Claim 1 wherein said telescoping splint comprises telescoping hollow structures that are selectively lockable and unlockable at a plurality of pre-determined lengths.

7. (Currently Amended) The apparatus of Claim 1 further comprising at least one intermediate limb support and stabilization member.

8. (Currently Amended) A method of generating traction on a damaged limb of a patient that involves the steps of:

releasably affixing a traction generating device to one or more longitudinal slots in a backboard, said traction generating device comprising a proximal support member, a distal support member, and an axial support member; wherein the distal support member is substantially at the distal end of the traction generating device such that the traction generating device does not extend distally beyond the distal support member;

placing a patient on the backboard;

adjustingexpanding a telescoping section of the splint of a traction generating device to fit the patient;

locking the telescoping sectionsplint of the traction generating device at a desired length;

affixing a proximal support member to a limb region closer to the body relative to the damaged region of said limb;

affixing a distal support member to a limb region further from the body relative to the damaged region of said limb; and

applying tension on said damaged limb by generating compressive forces within said telescoping section of said traction generating devicesplint; and

imaging the damaged limb while said traction generating device is still operably attached to the damaged limb of said patient.

9. (Original) The method of Claim 8 wherein said imaging comprises acquisition of X-ray, or fluoroscopic, or magnetic resonance images or analysis.

10. (Canceled)

11. (Original) The method of Claim 8 further comprising the step of measuring the amount of said compressive forces in said axial support member.

12. (Currently Amended) An apparatus adapted for generating traction on a limb having a bone fracture, said apparatus comprising:

a backboard adapted to accommodate a patient and support a patient under a substantial portion of the patient's body and a substantial portion of the patient's limb;

a distal limb support member, said distal limb support member adapted to secure the limb at a point distal to the bone fracture, said distal support member being distally movable relative to the backboard;

means for fixing the distal support member in relation to the backboard and the limb;

a proximal support meansmember for securing the patient to the traction generating apparatusbackboard at a point superior to the bone fracture; and

an axial support member for fixing the distal support member in relation to the proximal support member and generating compressive forces to move the distal support member away from the proximal support member;

wherein the proximal support member, the distal support member, and the axial support form a traction generating device that is releasably attached to slots in the backboard such that a distance between the proximal support member and the distal support member is fixed; and

wherein the distal support member is located substantially at the distal end of the traction generating device such that the traction generating device does not extend distally beyond the distal support member.

13. (Currently Amended) The apparatus of Claim 12 wherein the distal support member is adapted to secure the patient's foot in fixed relation to the

backboard, and the proximal support meansmember is adapted to secure the patient's chest or abdomen to the backboard.

14. (Currently Amended) The apparatus of Claim 12 wherein the distal support member is adapted to secure the patient's foot in fixed relation to the backboard, and the proximal support meansmember is adapted to secure the patient's thigh to the backboard.

15. (Original) The apparatus of Claim 12 wherein all components are fabricated from non-magnetic materials.

16. (Original) The apparatus of Claim 12 wherein all components are fabricated from radiolucent materials.

17. (Currently Amended) The apparatus of Claim 12 wherein the means for fixing the distal support member in relation to the backboard and the limb comprisesing a telescoping splint and means for fixing the telescoping splint to the backboard.

18. (Currently Amended) The apparatus of Claim 12 wherein the means for fixing the distal support member in relation to the backboard and the limb axial support member comprisingcomprises a telescoping splint and means for releasably attaching the telescoping splint to the backboard.

19. (Currently Amended) The apparatus of Claim 189 wherein the telescoping splint further comprises a controllable, lockable, articulating joint.

20. (Original) The apparatus of Claim 18 wherein the axial support member further comprises an adjustable standoff to support the limb in the proper position.

21. (Currently Amended) The apparatus of Claim 12 wherein the proximal support membermechanism comprises a friction pad affixed to a backboard and a strap to hold the torso and pelvis against the friction pad folds out from the backboard.

22. (New) The method of Claim 8 further comprising the step of removing the traction generating device and patient from the backboard while maintaining traction on the damaged limb so that the traction generating device stays with the patient.